

REMARKS

Claims 1-73 are pending. Claims 1-5, 8-10, 13, 14, 21, 23, 25, 30, 33, 65-68, 71, and 73 have been rejected. Claims 1, 5, 10, 20, 32, 34, 36, 51, 63, 65, 68, and 72 have been amended, and claims 4, 29, 35, and 60 have been canceled. After the foregoing amendments claims 1-3, 5-28, 30-34, and 36-60 will be pending.

Claims 1-4, 8-9, 13-14, 21, 23, 25, 30, 33, 65-67, 71, and 73 have been rejected under 35 U.S.C. 102(b) as being anticipated by EP 1225648 (“Shibata”). Independent claims 1, 34, and 65 have been amended to include a member that has “a porous region and a non-porous region.” Shibata does not disclose a fuel cell comprising a member having a porous region and a non-porous region. In fact, Shibata discloses a fuel cell that includes electrode layers that must be discontinuous (porous) and do not include regions that are continuous (non-porous) as the Office Action suggests. For example, Shibata states that “the adhering electrode layers (21, 31) should be discontinuous thin film layers” and that “discontinuous film layer means a layer that is not a continuous thin film and not uniformly dense.” (Shibata at ¶32). Shibata goes on to state that “[i]f the adhering electrode layers (21, 31) are continuous thin films that are uniformly dense, there is no room for the reactive gas to enter, and it is impossible to form the three-phase interface necessary for the cell reaction.” (Id.). Therefore, Shibata does not disclose a fuel cell comprising a member having a porous region and a non-porous region. Accordingly, because Shibata does not disclose all of the limitations found in claims 1, 34, and 65, Applicant respectfully submits that claims 1, 34, and 65 are in condition for allowance. Applicant also submits that all claims that ultimately depend from one of claims 1, 34, and 65 are also in condition for allowance.

Claims 5, 10, and 68 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata in view of U.S. Pre-Grant Publication No. 2002/0048699 (“Steele”). Applicant has amended claims 1, 34, and 65 to include a member that has “a porous region and a non-porous region, the member comprising metallic titanium or an alloy thereof comprising at least 51 wt% titanium.” Applicant requests reconsideration of these rejections because even the Examiner’s modification of the patents’ respective teaching would not have produced any claimed invention. The Office Action, for example, asserts that it would have been obvious to include cerium gadolinium oxide as the electrolyte, and for the porous region to be bound

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by the non-porous region in the fuel cell disclosed by the Shibata patent (Office Action at page 4). Even if such modifications were obvious, however, they still would not have produced any fuel cell comprising a member having a porous region and a non-porous region, the member comprising metallic titanium or an alloy thereof comprising at least 51 wt% titanium. Indeed, the Office Action does not identify any disclosure in the cited patents that so much as suggests these features. Accordingly, the rejection under Section 103 is improper and should be withdrawn. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974) (all limitations set forth in a patent claim must be taught or suggested in the prior art to establish a prima facie case of obviousness)

Favorable consideration and an early notice of allowance are earnestly solicited. If the Examiner believes that a telephone conversation would further the prosecution of this case, he is invited to telephone the undersigned at his convenience.

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